



PATENT APPLICATION # 8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Lkd to draftman
KJ
5-202

In re the Application of

Michael NAHUM et al.

Group Art Unit: 2877

Application No.: 09/731,671

Examiner:

Filed: December 18, 2000

Docket No.: 106539

For: SYSTEM AND METHOD FOR HIGH-ACCURACY DISPLACEMENT
DETERMINATION IN A CORRELATION BASED POSITION TRANSDUCER

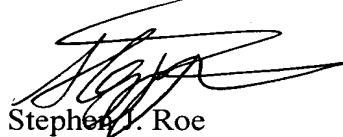
LETTER TO THE OFFICIAL DRAFTSPERSON

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

Please substitute the attached 16 sheets of formal drawings depicting Figures 1-20 for
the corresponding informal drawings filed with the application.

Respectfully submitted,



Stephen J. Roe
Registration No. 34,463

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Date: April 24, 2002

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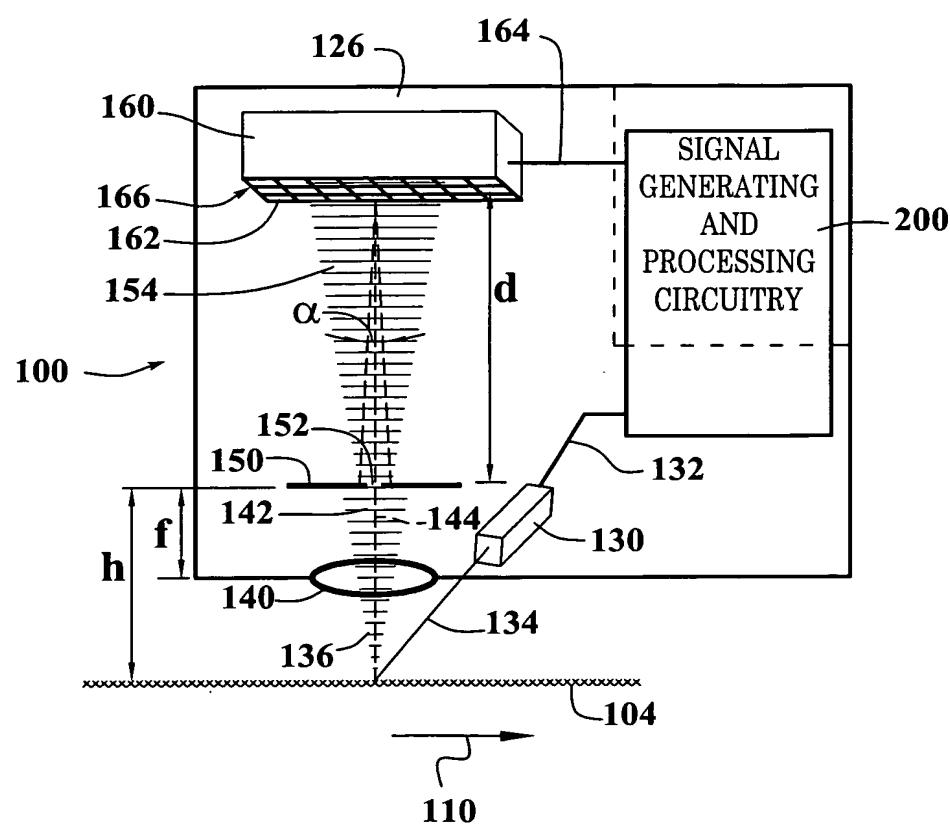


FIG. 1

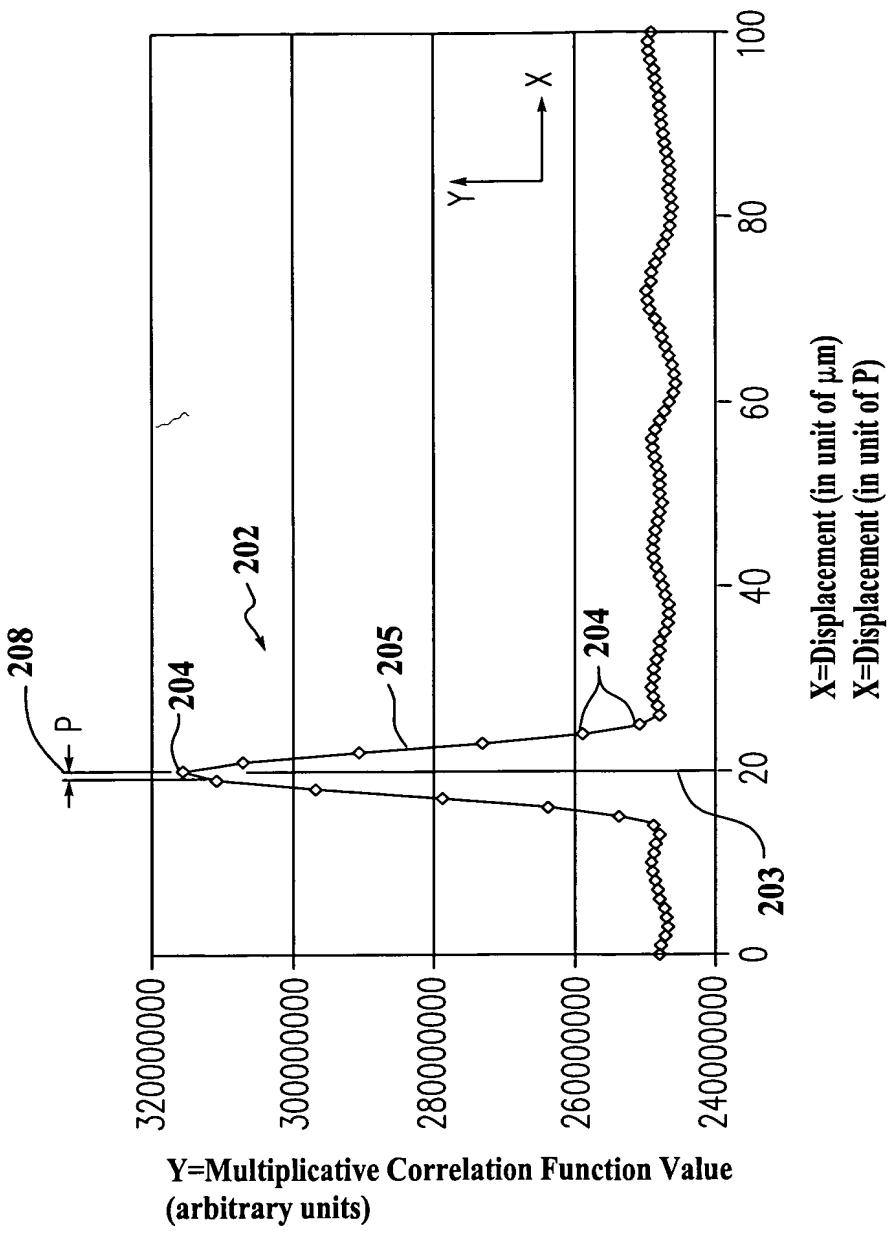


FIG. 2

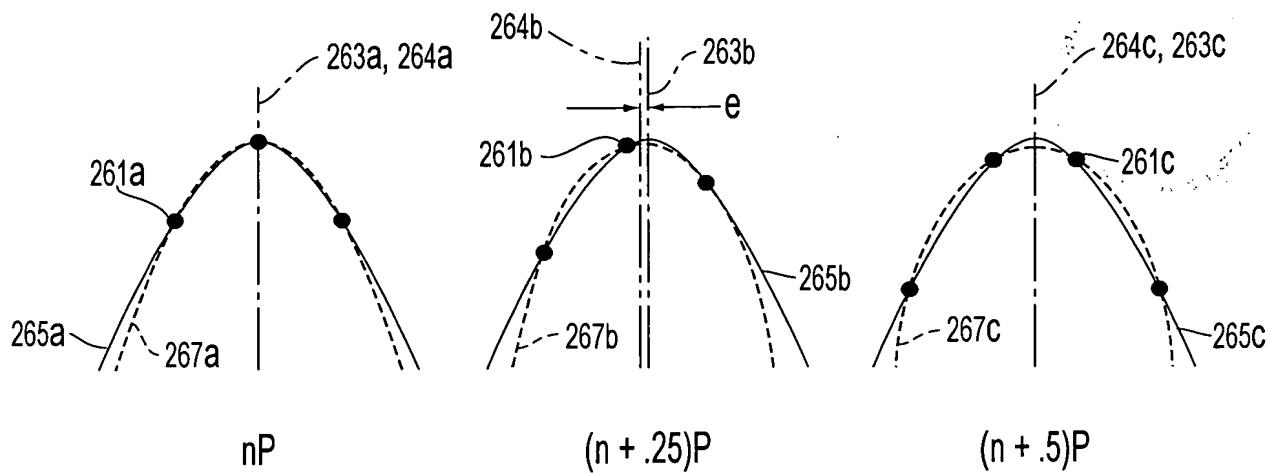


FIG. 3

FIG. 4

FIG. 5

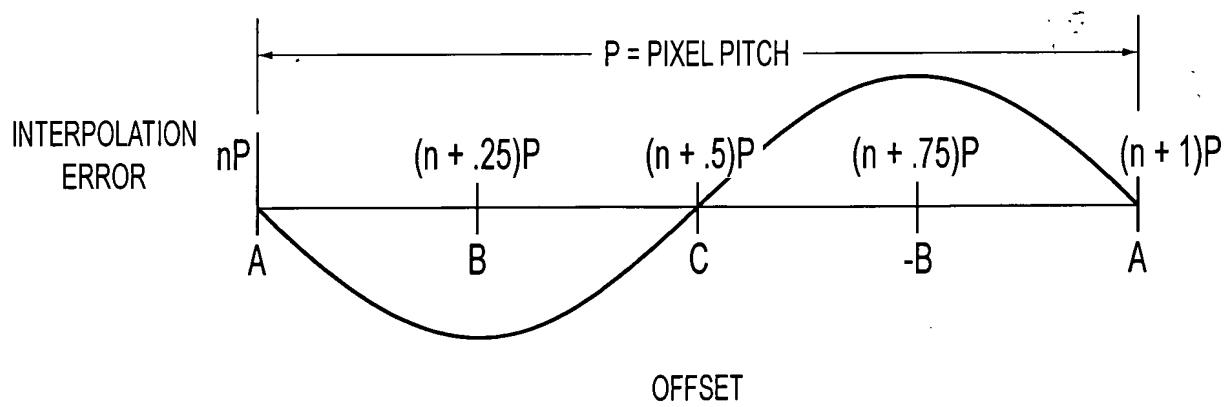
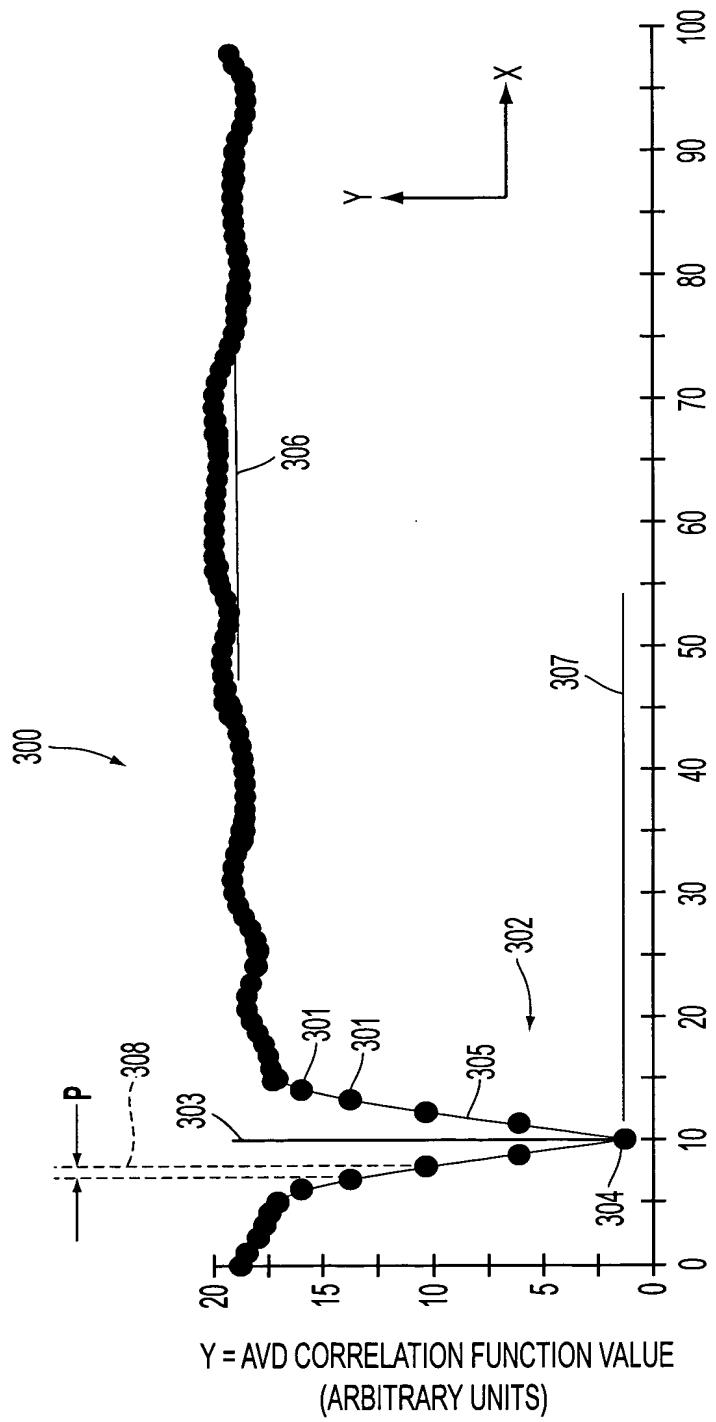


FIG. 6



X = DISPLACEMENT (IN UNIT OF μm)
X = DISPLACEMENT (IN UNIT OF P)

FIG. 7

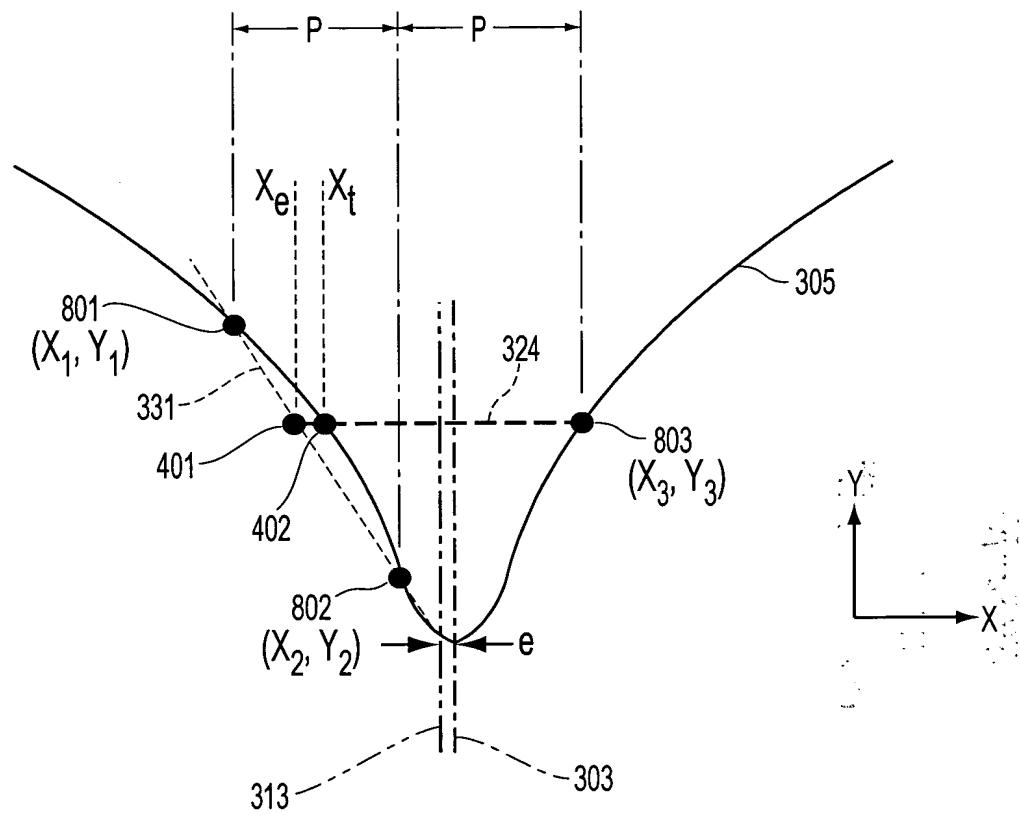


FIG. 8

SINUSOIDAL COMPENSATION

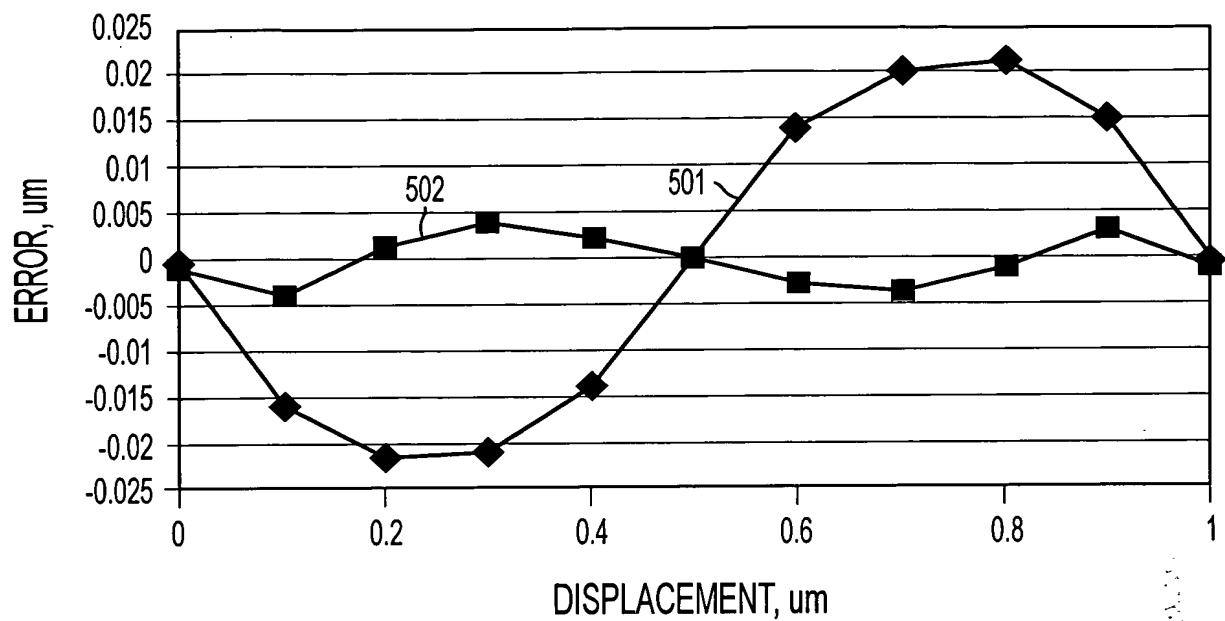


FIG. 9

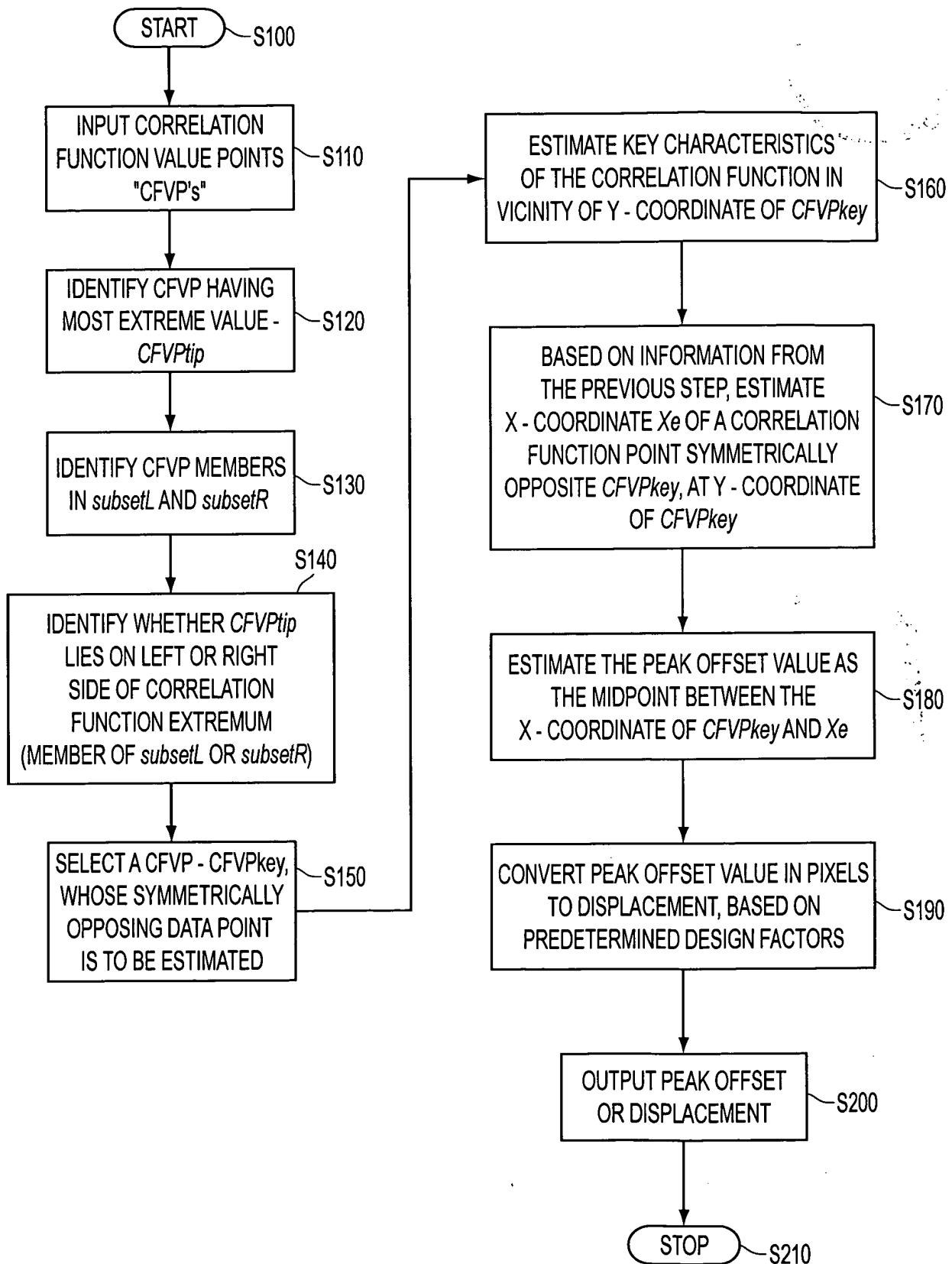


FIG. 10

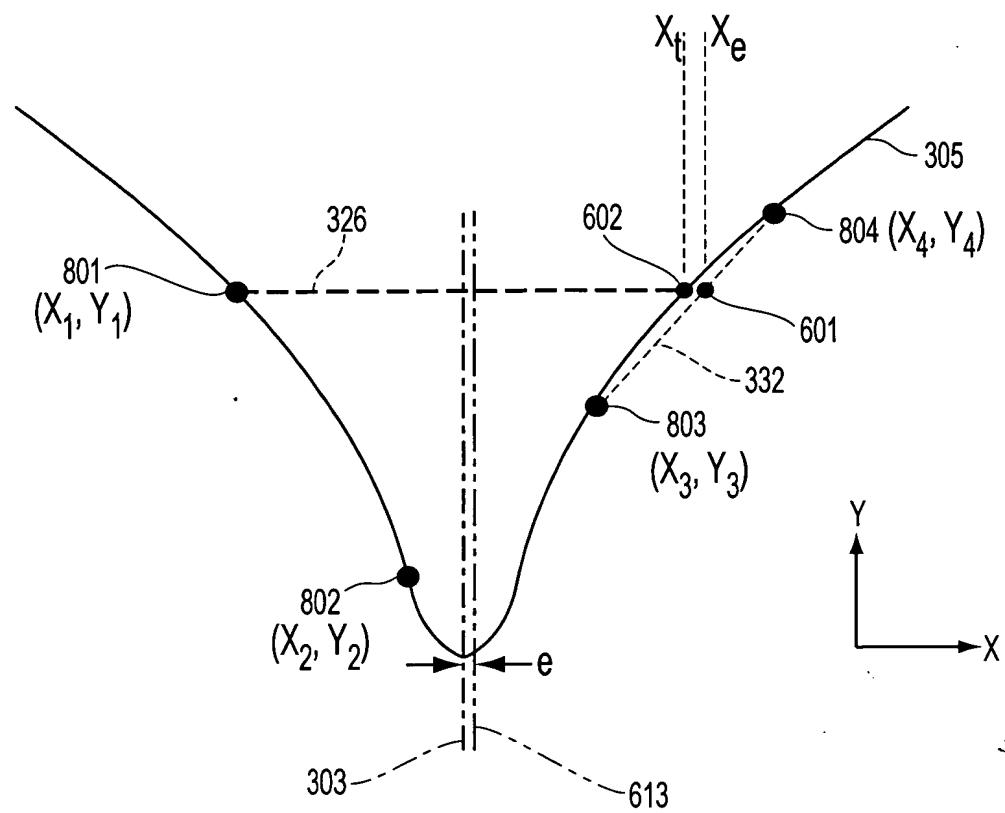


FIG. 11

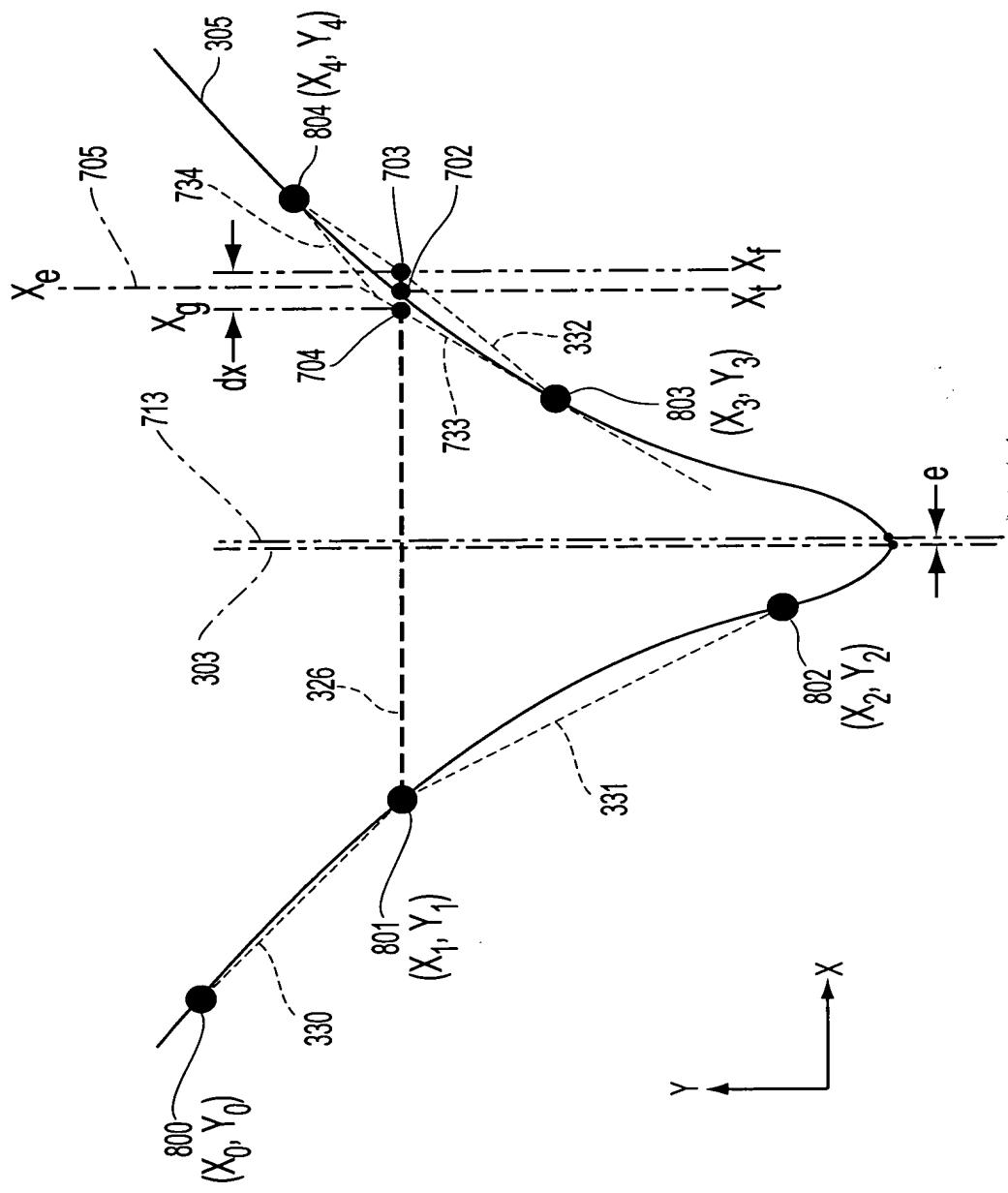


FIG. 12

PERIODIC ERRORS, PINHOLE = 1.5 mm

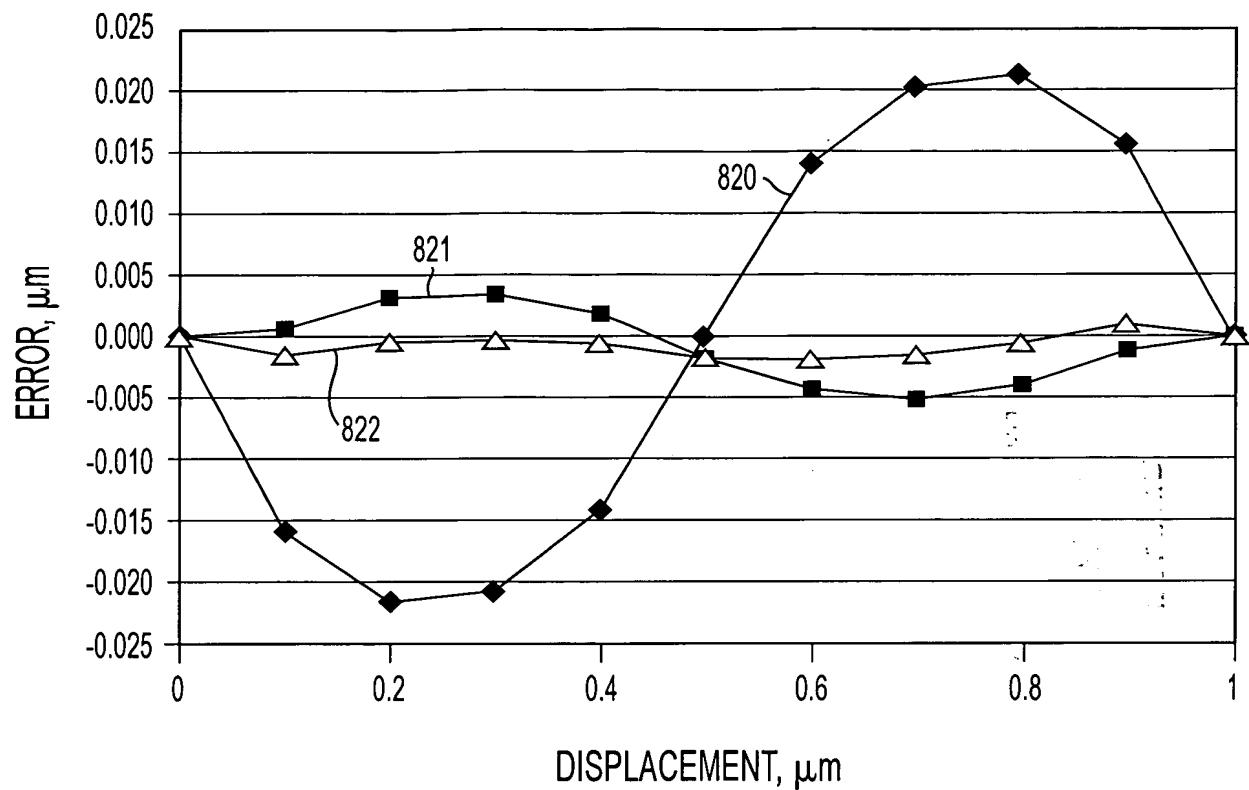


FIG. 13

FIG. 15

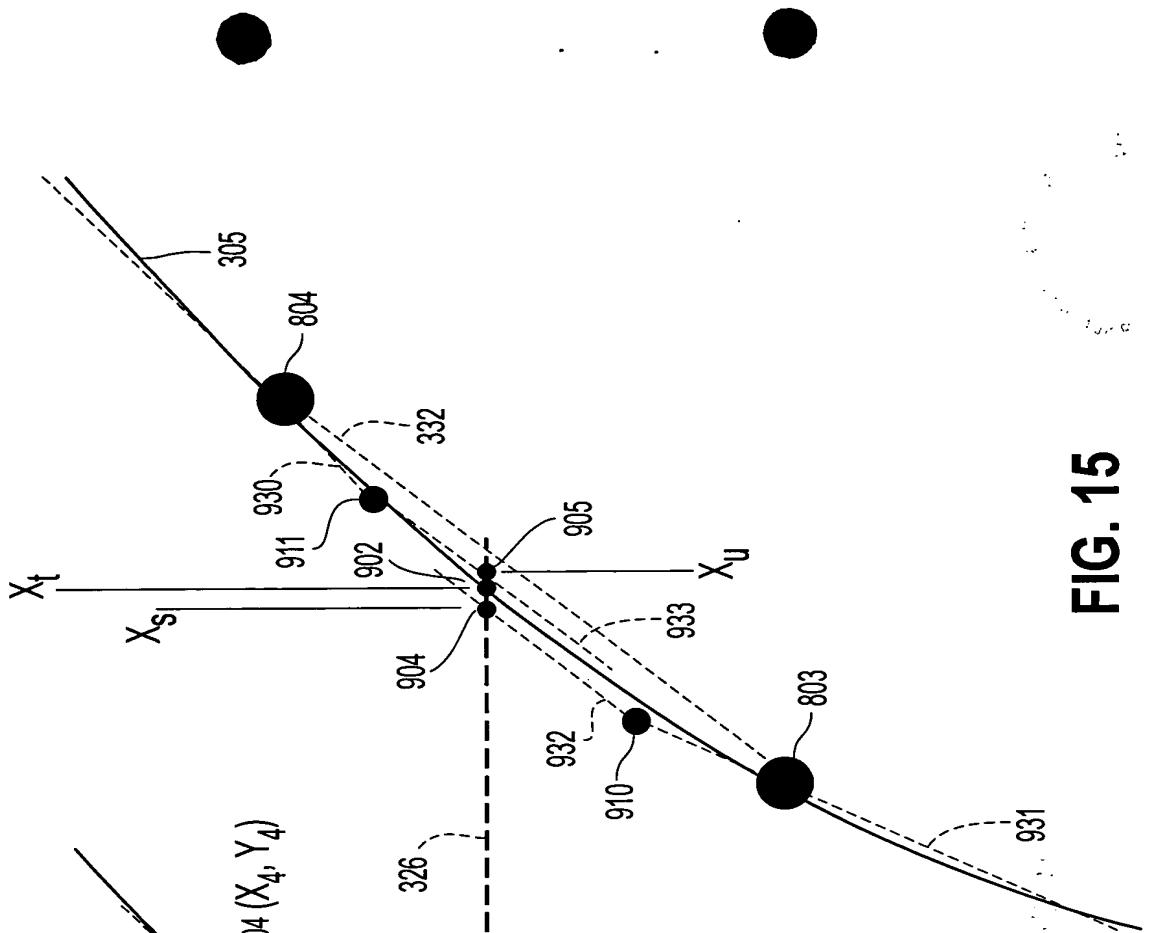


FIG. 14

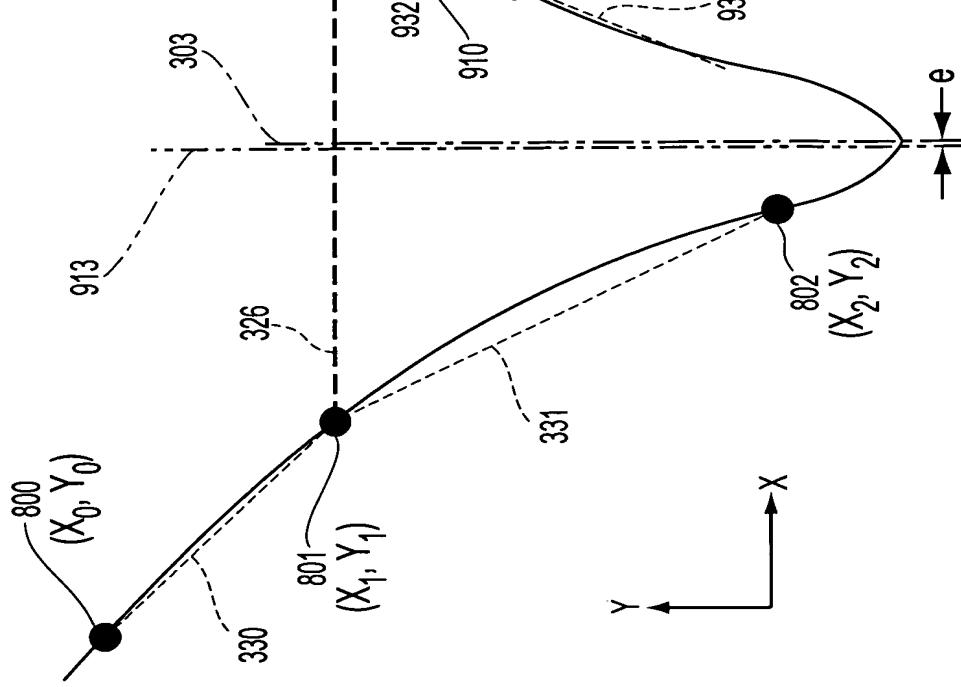
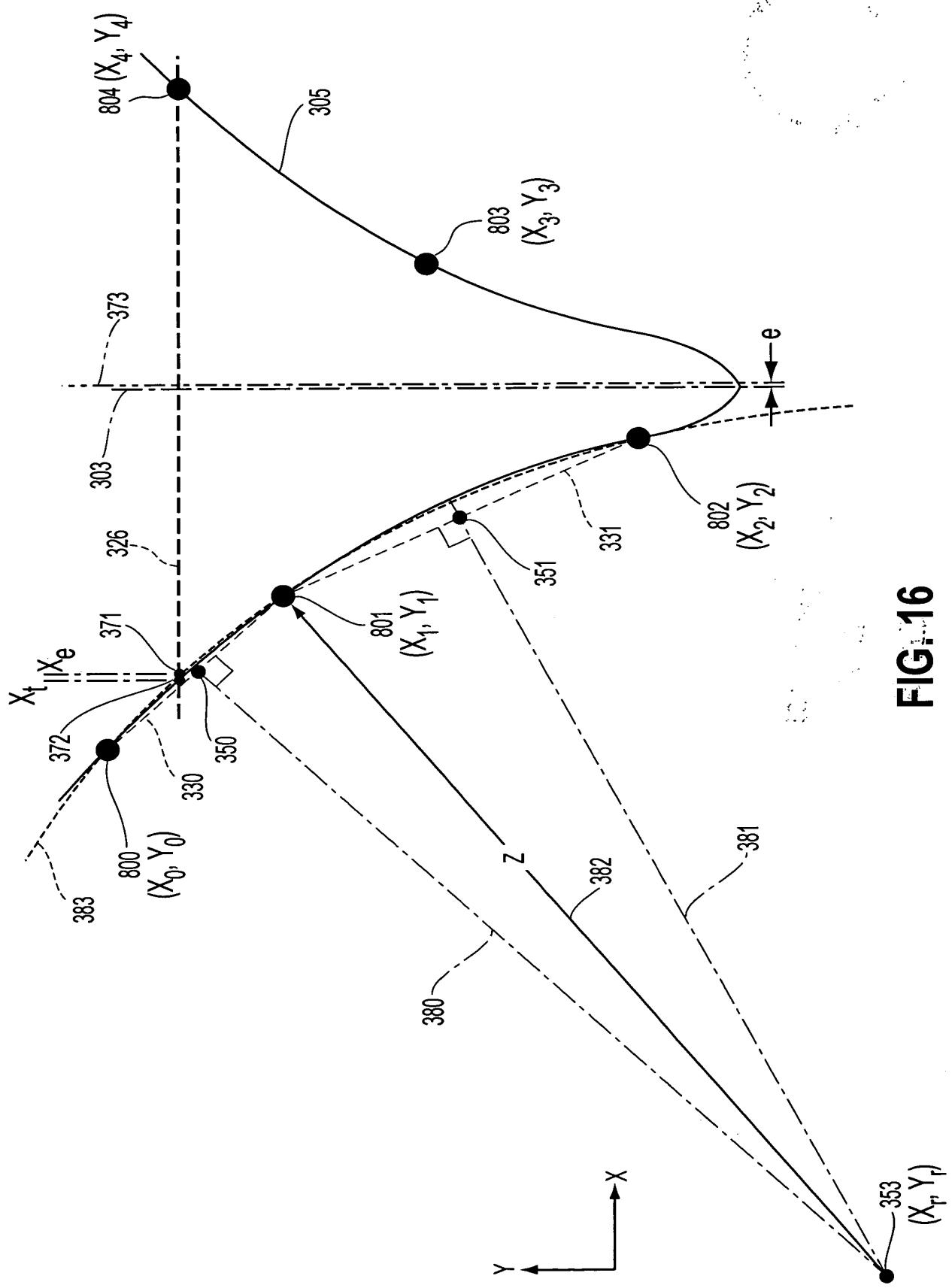


FIG. 16



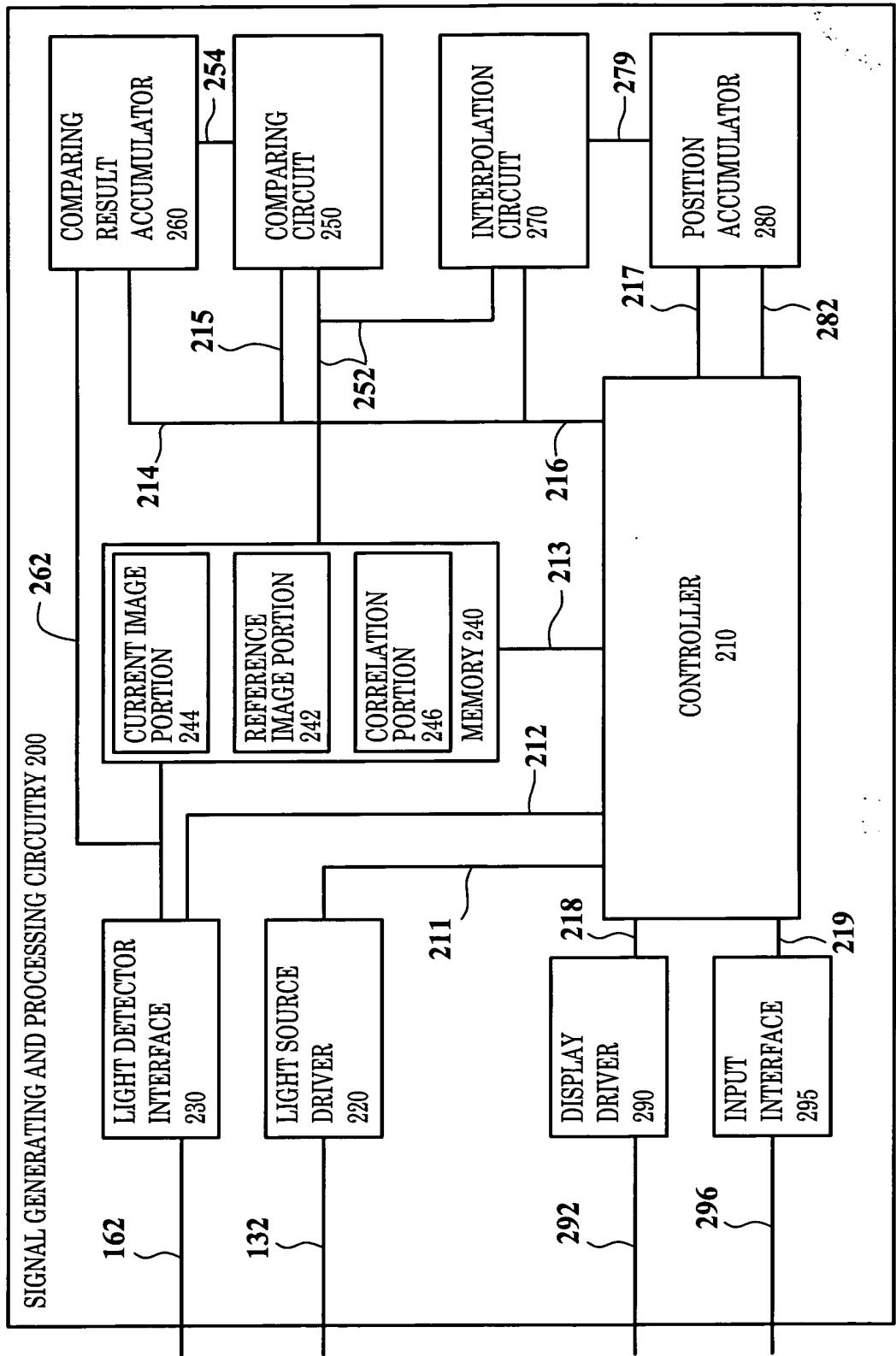


FIG. 17

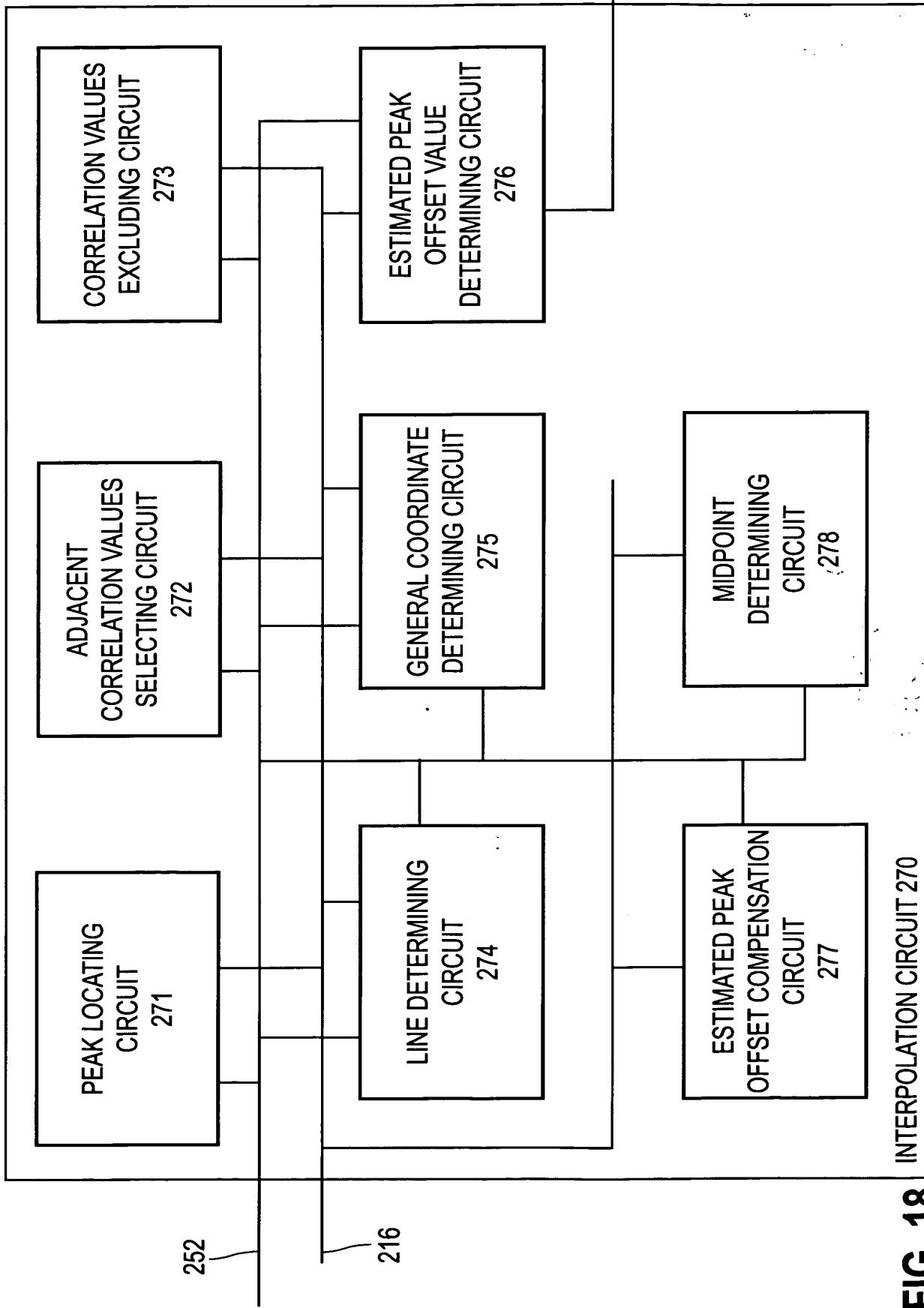


FIG. 18

INTERPOLATION CIRCUIT 270

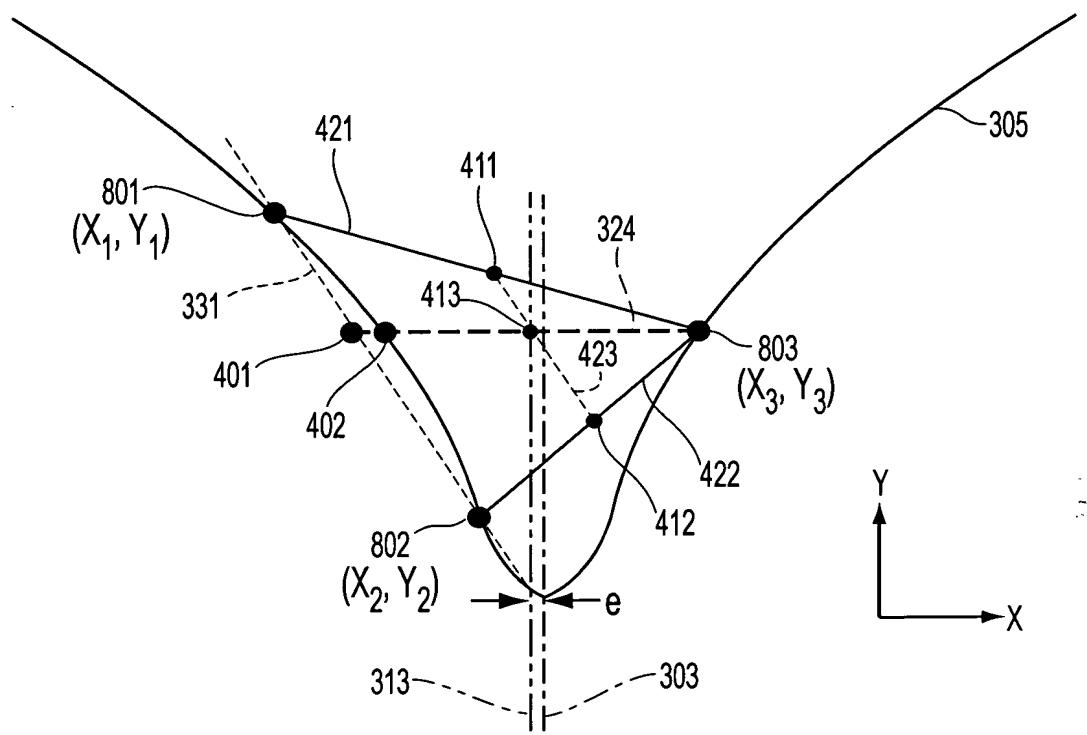


FIG. 19

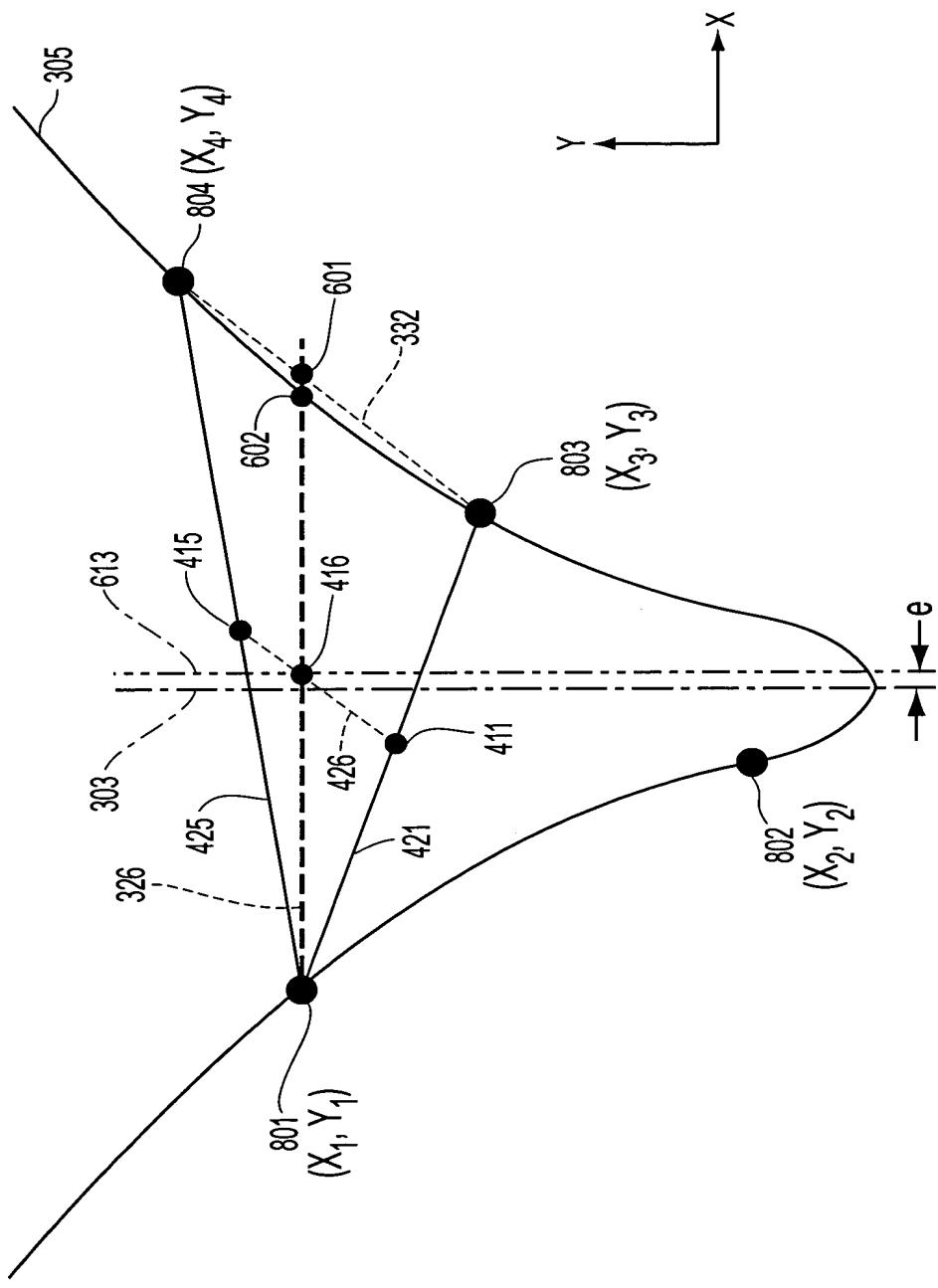


FIG. 20